Transit Planning Board
WORKING TOGETHER – CONNECTING OUR REGION

Fare Policy and Structure

Transit Planning Board

Planning and Funding Committee

March 22, 2007

Overview

- Parts of Fare Policy
  - Technology
  - Differentiation
  - Structure
  - Collection Systems
- Decision Points –
  - Do we include Local Bus in Zone/Distance Examination?
  - Do we examine Proof-of-Payment?

Technology

- Decision has been made to use electronic fare media – Breeze

- Breeze can accommodate all the fare structures, differentiations, and systems discussed later

Differentiation – How to vary the base fare

- Peak/Off Peak – Different prices for travel and different times
- Transfers – Free or paid
- Premium Service Surcharge – Charging more for extra services such as more comfortable vehicles, limited stops
- Multi-ride tickets – discounts for buying rides in bulk
- Unlimited Ride Passes – Unlimited rides during a specific amount of time
- Special Fares – Half-fare (federally mandated), youth, student, university
- Multi-Agency Tickets – Tickets valid on multiple agencies
- Multi-Agency Passes – Passes valid on multiple agencies

Differentiation - Existing

Differentiation	MARTA	*Xpress*	CCT	GCT	C-TRAN
Peak/Off Peak		Reverse Commute Rides discounted			
Transfers	Agreements with all other systems	Agreements with MARTA	Agreements with MARTA	Agreements with MARTA	Agreements with MARTA
Premium Service Surcharge			Express bus services to Atlanta	Express bus services to Atlanta, Local to Express Upgrade fare	
Multi-Ride Passes	10 and 20 trip tickets	20 and 40 ride passes	10 and 20 ride tickets	local and express 10 ride ticket	20 trip ticket
Unlimited Ride Passes	7 day, 30 day, and multi-day visitor passes	31 day passes	Local and Express 31 day pass	Local and Express monthly pass	31 day pass
Special Fares	65+ half fare and Student (K-12) and University Pass Programs		Reduced fare for 65+ and <18	Reduced fare for 65+ and <18	half fare for 65+

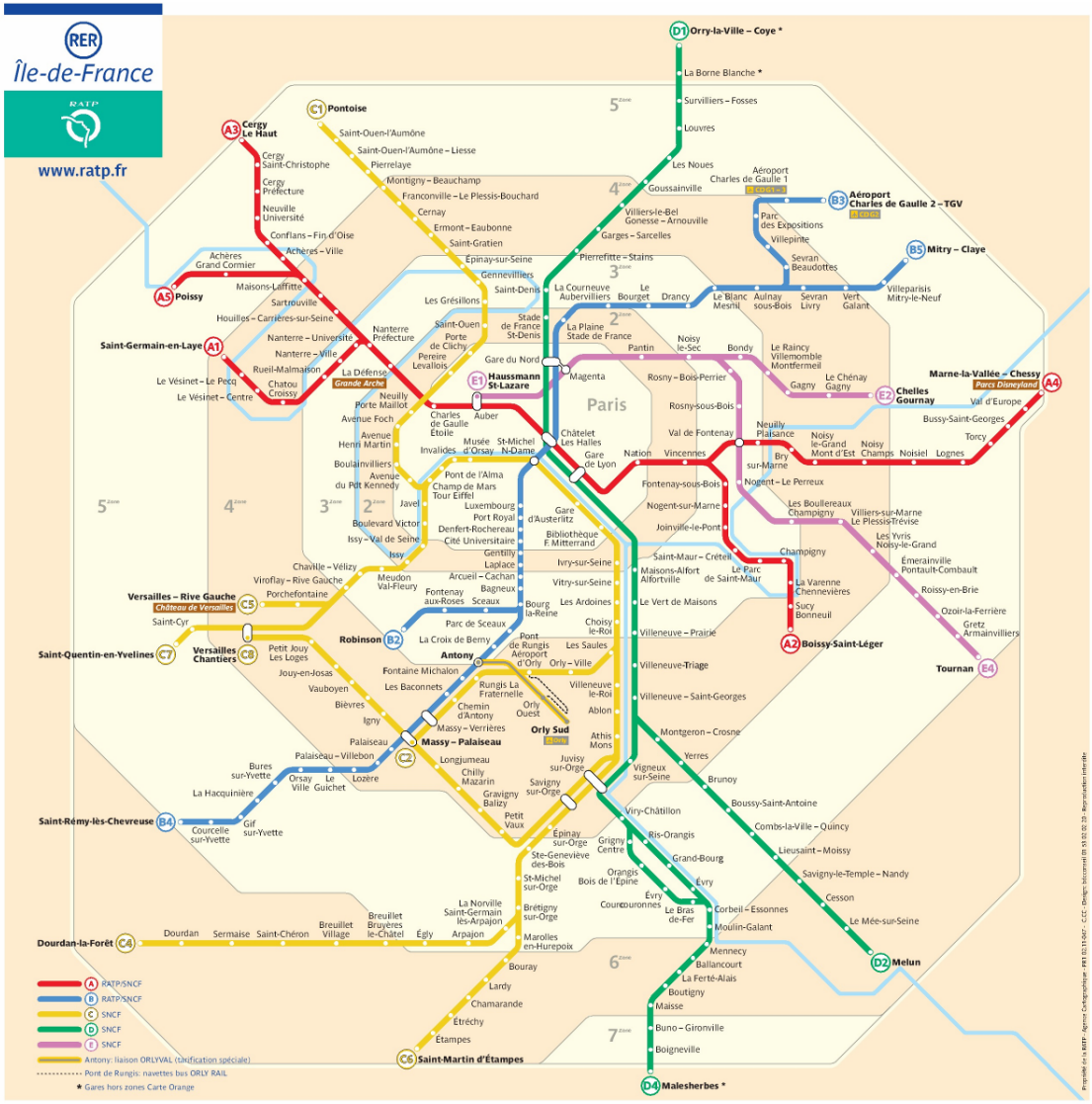
*** Other Examples from other cities presented in Appendix B in Paper*

Fare Structures

- Flat Fares – Currently Used in Atlanta by all operators
- Zonal – Region divided into zones with trip cost dependent upon number of zones traveled
- Distance Based – Fare based upon distance traveled so every trip has different fare

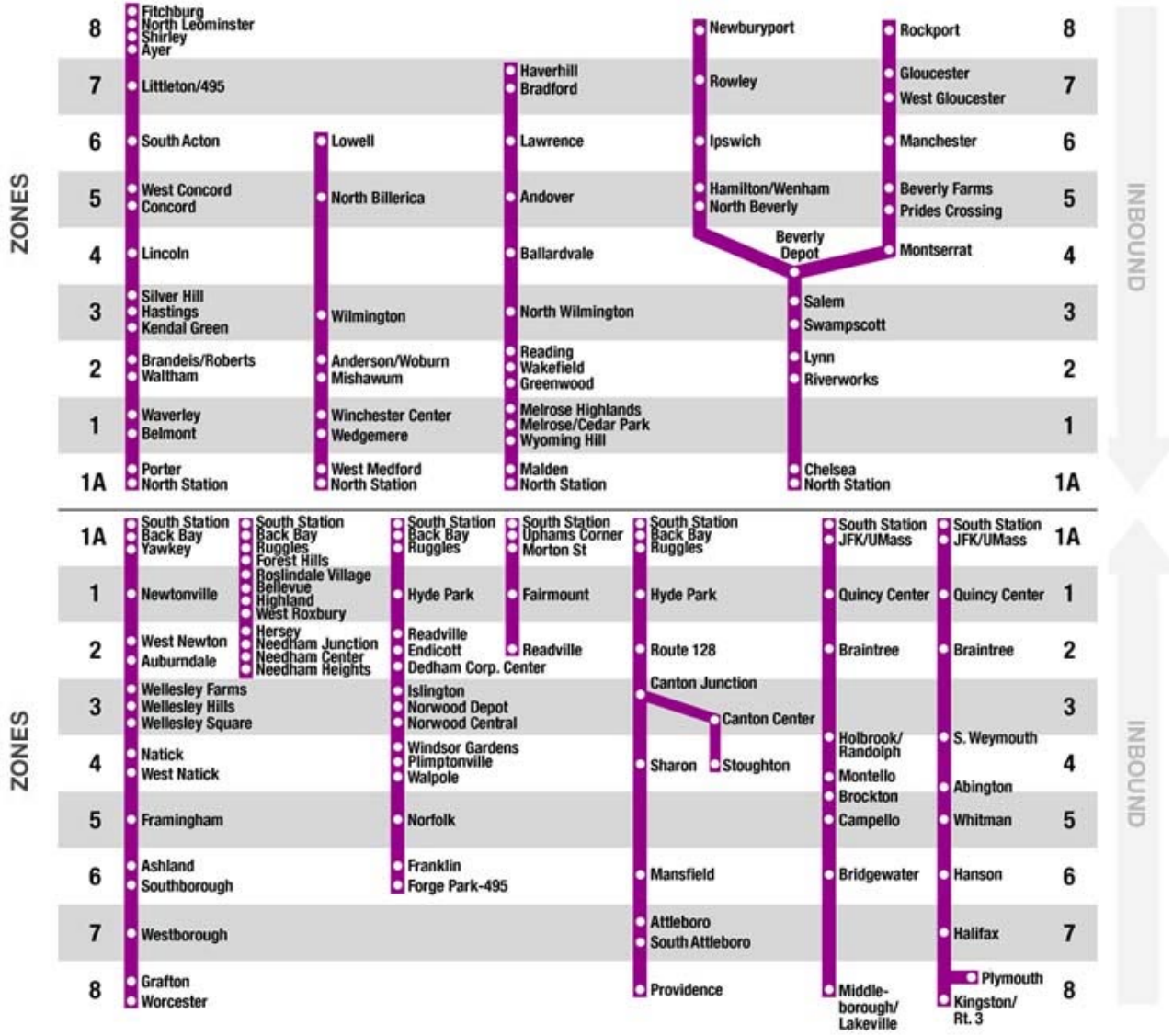
Fare Structures:

Example - Paris Regional Rail Zones



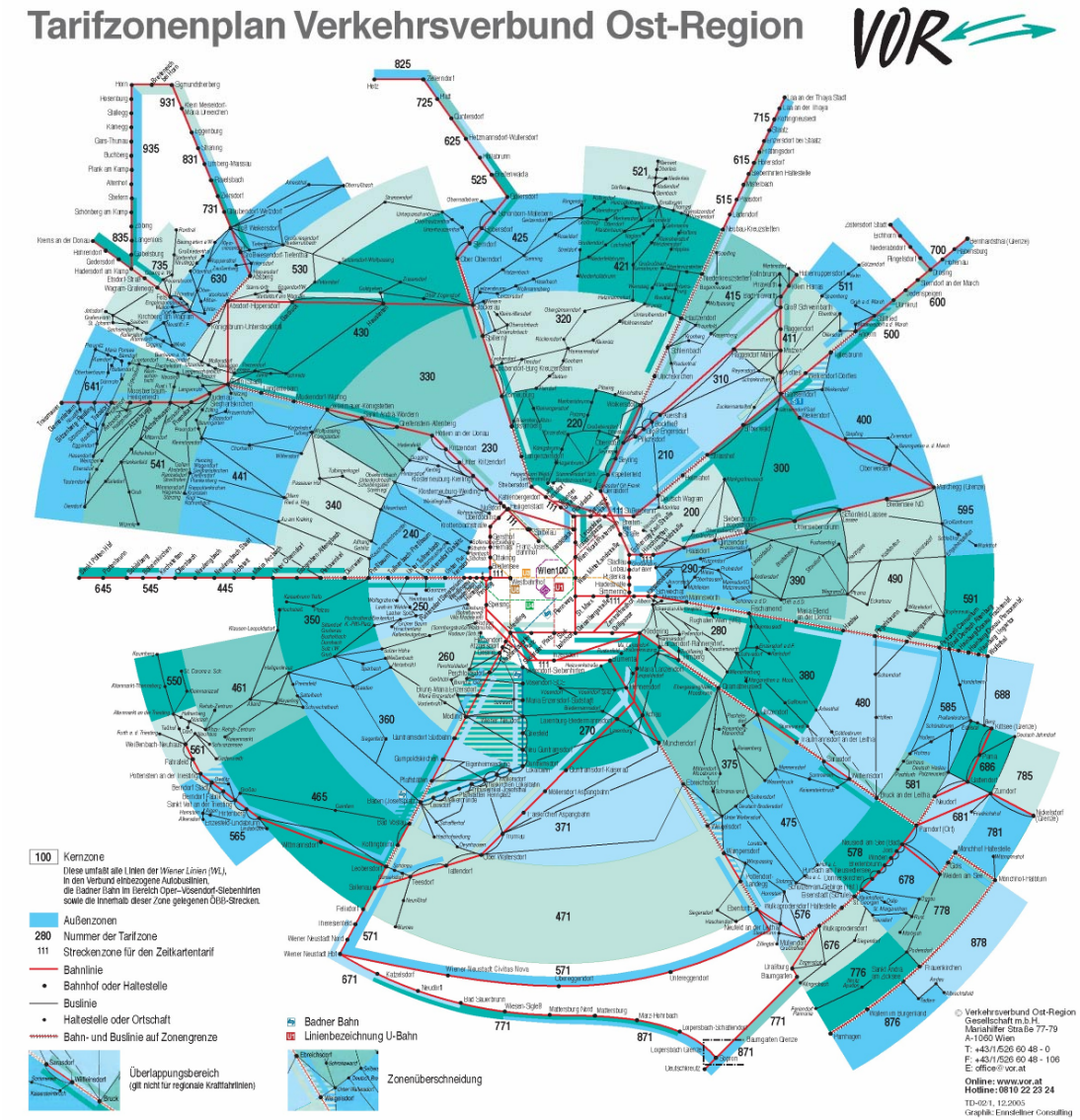
Fare Structures:

Example – Boston Commuter Rail Zones



Fare Structures:

Example - Vienna Regional Rail & Bus Zones



Fare Structure: Distance Based

- Base fare with an additional cost per mile:
  - Example: $0.50 base + $0.10 /mile
    - Midtown to Lindbergh =

      $0.50 + $0.10 * 3 miles = $0.80
    - Midtown to Airport =

      $0.50 + $0.10 * 13 miles = $1.80
  - This method:
    - Least Expensive: $0.55 cents (Phillips to Five Points
    - Most Expensive: $3.95 (Town Center to Airport)

Fare Structure: Distance / Zonal Benefits and challenges

- Easier to implement with limited stop/barrier services (Express Bus and Barrier Stations)
- Zonal Based
  - Zones a proxy for distances
  - Easier for public and operators to understand
- Distance Based
  - Every trip has a different price
  - Usually has a base cost plus a Cents/mile cost determined by distance
- Challenges
  - Particularly for local bus – how to charge for exit?
  - Likely increase in fare disputes

Collection Systems: Barrier Systems

- Barrier Systems
  - Gates or turnstiles that have a paid and free area and require patrons to pay before entering
  - Allows faster boarding and alighting
  - Current method on rail system in Atlanta
  - Proposed Method for BRT Stations in Region

Collection Systems: Pay as Your Board/Exit

- Pay as you Board
  - Patrons pay fare as they board the vehicle, usually to the driver
  - Delays boarding
  - Zonal / Distance based would have to pay as exit – Minneapolis uses pay as exit and only on evening express routes
  - Current Method on buses in Atlanta; used off-peak on Cleveland Heavy Rail line and on surface LRT lines in Boston and Cleveland

Collection Systems: Proof of Payment

- Patrons purchase tickets from vending machines and validate by stamping or tapping the electronic card; can be checked at any time
- Allows faster boarding and alighting on surface vehicles
- Allows drivers to concentrate on operating the vehicle
- Can have Vending Machines on Board
- Compatible with surface operations of zonal and distance based fares
- Requires fare inspectors and high fines (range from $75 in Dallas up to $500 in San Francisco)
- Used in most U.S. LRT lines and some commuter rail lines in U.S.

Collection Systems: Examples of POP Machines

Fare Structure: Current Collection Systems Ease of Implementation

Mode	Distance	Zonal	Flat
Local Bus	Difficult	Difficult	Easy
Express Bus	Easy	Easy	Easy
Heavy Rail	Easy	Easy	Easy
Exclusive BRT	Easy	Easy	Easy
Arterial BRT/Light Rail	Difficult	Difficult	Medium
Commuter Rail	Medium	Medium	Medium

Decision Points

- We know the board wants us to examine distance and zonal fares for the rail, BRT, and Express Bus System
- Does the Board want to examine Distance Based and Zonal for Local Bus?
- New Systems (Beltline rail, Peachtree Streetcar, Commuter Rail, Arterial BRT) use POP? If Distance/Zonal for Local bus – switch to POP?

Change	Pros	Cons
Zonal/Distance Based Fares with Barrier system for rail and BRT and pay as board/exit for buses	• Fares differentiated by distance • Fairly easy to implement on the rail system	• How to deal with buses that cross multiple zones? o Cost to retrain drivers o Increases in fare disputes o Increase in boarding/alighting times • Transfers • New fare system for patrons • Equity issues
Zonal/Distance Based fares with barrier system for rail and BRT and POP for buses	• Fares differentiated by distance • Fairly easy to implement on the rail system • Decreased boarding time for buses • If security carries out enforcement, increased security presence on system	• Cost of machines/driver training for fares onboard buses • Equity Issues • Completely new fare system for patrons • Increased cost of enforcement
Multi-Agency Ticket/Passes	• Single Regional Fare Media • Potential to recover more cost based upon fare selected • Initial concept of distance based ticket • Maintains Existing Operator Independence to set fares within jurisdiction • Operators recover more of cost since transfer cost built into ticket price	• Increase patron costs since cost of transfer built into ticket price
Zonal/Distance Based fares with barrier system for rail and BRT with multi-agency ticket/passes for buses	• Single Regional Fare Media • Potential to recover more cost based upon fare selected • Fares differentiated by distance • Operators recover more of cost since transfer cost built into ticket price • Maintains Existing Operator Independence to set fares within jurisdiction	• Increase patron costs since cost of transfer built into ticket price • Equity Issues
Complete POP system with zonal /distance based fares	• Reduces boarding times • Improves access to overall system by eliminating barriers • If fare enforcement carried out by security, increased security visibility on system • Allows full implementation of zonal/distance based fares	• Increased cost of enforcement • Completely new fare system and structure for patrons to learn • Cost of retraining operators and vendors • Cost of ticket validation machines